Restriction Endonuclease

SibEnzyme®

AspLE I

Recognition Sequence: GCG↓C
C↑GCG

S

E221

500 units

10,000 u/ml

Lot:

Exp:

Store at -20°C

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	10-25	75-100	100	50-75	25-50	100

37°C | NO | O | λ

For more details scen the code

Ph/F+7(383)333-6853
info@sibenzyme.com
www.sibenzyme.com

CERTIFICATE OF ANALYSIS

Source: *Arthrobacter species Le3860.*

Supplied in:
10 mM Tris-HCl (pH 7.5), 100 mM NaCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 100 µg/ml BSA, 50% glycerol.

Reaction Conditions:
1x SE-Buffer O, Incubate at 37° C.

1X SE-Buffer O (pH 8.5 @ 25° C):
50 mM Tris-HCl 100 mM NaCl
10 mM $MgCl_2$ 1 mM DTT

Heat Inactivation:
No (80°C for 20 minutes).

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of λ DNA in 1 hour at 37° C in a total reaction volume of 50 µl.

Quality Control Assays
Ligation:After 10-fold overdigestion with AspLE I, ＞90% of the DNA fragments can be ligated with T4 DNA Ligase and recut.

16-Hour Incubation:A 50 µl reaction containing 1 µg of DNA and 20 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.

Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 10 units of restriction endonuclease for 3 hours.

Enzyme Properties:
When using a buffer other than the optimal (Supplied) SE-Buffer, it may be necessary to add more enzymes to achieve complete digestion.

Blocked by
5'-G(5mC)GC-3'/3-CG(5mC)G-5' methylation.
Not blocked by
5'-GCG(5mC)-3'/3`-(5mC)GCG-5` or
5'-GCG(5mC)-3'/3'-CGCG-5' methylation.

Cut hemi methylated site: 5'-G(5mC)GC-3'/3'-CGCG-5'

Reagents Supplied with Enzyme:
10X SE Buffer O.